Practice worksheet | Integration techniques and applications

Substitution

Name: _____ Date: _____

6 questions | 12 marks

1. Find $\int \frac{2x}{x^2+1}\,dx$. [2 marks]

2. Find $\int \cos x \sin^3 x\,dx$. [2 marks]

3. Find $\int \frac{x}{\sqrt{4+x^2}}\,dx$. [2 marks]

4. Find $\int (3x+1)^5\,dx$. [2 marks]

5. Find $\int \frac{e^{2x}}{1+e^{2x}}\,dx$. [2 marks]

6. Evaluate $\int_0^2 x(1+x^2)\,dx$. [2 marks]